

Simonds (J. C.)

AN ADDRESS

ON THE

SANITARY CONDITION OF NEW ORLEANS,

AS ILLUSTRATED BY ITS

MORTUARY STATISTICS:

✓
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REPRINTED FROM 'FENNER'S SOUTHERN MEDICAL REPORTS,' WITH THE REMARKS OF
THE EDITOR.



New Orleans:

PRINTED AND PUBLISHED BY D. DAVIES, SON & CO.,

57 CAMP STREET.

1851.

TO
THE CITIZENS OF NEW ORLEANS,

WHOSE TRUE INTERESTS IT IS INTENDED TO PROMOTE,

AND WHOSE WELFARE IT WILL SUBSERVE,

EITHER NOW OR HEREAFTER,

This Address is Dedicated, by

THE AUTHOR.

If anything can awaken the citizens of New Orleans to the importance of sanitary measures, it will be such developments as are set forth in this extraordinary paper. Whilst it can but be extremely painful and humiliating thus to expose to public view the errors and defects of our municipal government, it seems to be alike demanded by a due regard for the safety and happiness of the present inhabitants, and the future progress of the city. Dr. Simonds has performed an arduous and a thankless task;—one that may bring him more obloquy than praise, more denunciation than gratitude. For the present, then, he must rely for support upon the rectitude of his own intentions, and the hope of ultimately doing good. He boldly assumes the responsibility of publishing to the world the startling facts set forth in this paper; and it is but justice to say, that however at variance they may appear to be with our preconceived notions, or with public sentiment in this quarter, they are placed upon a basis of *recorded figures* that entitles them to profound consideration. He appears to have fabricated nothing; nor has he ventured to draw hypothetical deductions from imaginary premises; all he attempts is to collect and display recorded facts, to compare these with similar facts at other places, to show the most rational conclusions to which they lead, and to indicate their application to our own improvement and benefit. If any one questions either the facts or conclusions here presented, let him show their fallacy, rather than express doubts that may tend to destroy the confidence to which they may be justly entitled. The subject is one of vital importance to this community, and worthy of serious consideration. Doubtless much may be done to improve the sanitary condition of this city, but it is vain to expect that any important measures will be adopted until the people become convinced of their necessity; and this can only be done by laying before them the facts, and comparing our condition, in respect to sickness and death, with that of other cities. In view of this object, the able author of this paper has labored with great energy, and, as he had determined to publish it somewhere, we thought it much better for it to come out at *home* than *abroad*. Dr. S. is a man of a sound, mathematical mind, and peculiarly fitted for such a task as he has here undertaken. His language is bold, and may grate rather harshly upon the sensibilities of some who occupy prominent positions, but if anything will admit of strong language, it is the discussion of matters involving not only the advancement of our city, but the health and safety of ourselves and families. Official conduct may be even severely criticised, without necessarily implying any personal unkindness.

‘This paper was read before the Phyico-Medical Society, and, at the recommendation of this Society, it was read to the public, in the Lyceum Hall. It is to be hoped that its admonitions will be heeded.’

ADDRESS,

ETC.

Two years ago I attended a meeting of the American Medical Association, which was held in Boston. I there found that the subject of sanitary reform was exciting considerable attention, and that this was based, as it always must be, upon statistical investigations into the actual and comparative number of the births, marriages and deaths, in different localities. In my intercourse with various persons there and elsewhere, I found that New Orleans enjoyed the very undesirable reputation of being one of the most unhealthy localities in the United States. I knew that here we thought our city very healthy. My colleague on that occasion, who had long been a resident of this city, did not hesitate to avow his opinion of its general salubrity. In reply to an attempt to prove its unhealthiness by a reference to the very violent epidemic of 1847, he said, that *only* about 3,000 died of yellow fever during that year; and I heard the remark afterwards quoted as a most astounding difference of opinion regarding the value of human life. I then proposed to myself to undertake the investigation of this question, with the determination to set it, if possible, finally at rest, and with the hope of being able to convince the world, by an array of unquestionable statistical details and impregnable arguments, that it had done injustice to New Orleans, and that our city was not the Golgotha which it was everywhere represented to be. The subject had not been pursued long when I found that we were laboring under a delusion, and that we had long deceived ourselves regarding the salubrity of our city. This only urged me to more extensive researches, and a more thorough examination of the subject, that I might ascertain the causes of this great mortality, and determine if it could be explained consistently with the theory of the salubrity of New Orleans.

The difficulties encountered in the pursuit of this investigation have been very great. Authentic data were obtained with the greatest difficulty;—at times repulsed, because not clothed with official authority, that would enable me to demand the information desired;—in general meeting with courtesy at the hands of those from whom the data were to be obtained, my researches have been facilitated by the use of pens and paper, and the liberty to work out for myself what I desired, under the cold and criticising eyes of those who probably regarded me with distrust, as half a madman, for endeavoring to collect information that was not directly convertible into dollars and cents.

After these difficulties were surmounted, and the necessary data were collected, the labor of thoroughly digesting and analyzing such multifarious materials, was vastly greater than any one of my hearers can possibly conceive. These difficulties have been surmounted—this labor has been performed—and all the apologies for the great number of deaths, and the arguments in favor of the salubrity of New Orleans, have been thoroughly examined and carefully considered. The conclusions to which I have arrived have not been favorable to the opinion here entertained, but have justified the worst opinion existing abroad regarding the sanitary condition of our city. Shall these conclusions be published to the world? shall they be uttered here? Here, if anywhere, the subject should be agitated. But who will heed? who will believe statements directly conflicting with the general sentiment of the community, and apparently injurious to its best interests? A simple love for the truth would at once decide in favor of its unreserved publication. But when I scrutinize the hygienic regulations of the city, to see if they be susceptible of amelioration, and when I decide that a certain portion of the deaths annually occurring here might be prevented by a proper sanatory system, every sentiment of humanity—every impulse of philanthropy, and even the dictates of self-interest, decide in favor of their promulgation in the most glaring colors that truth will justify.

It is constantly asserted, and generally believed, that it will injure the prosperity of New Orleans to admit, in the public

press, that it is an unhealthy city. This assertion I do not believe, but feel well assured that an honest statement of the truth with regard to the health of the city, would ultimately promote its true interest and permanent prosperity. At present the truth is so well known abroad, and so studiously concealed at home, that the statements of the press are unheeded and disbelieved. It is time to adopt a different policy: to direct our attention to an investigation that will determine the truth, regardless of its influence upon opinions abroad, and to commence endeavoring to improve the health of the city.

If New Orleans can only be sustained by a concealment of the truth, and a criminal immolation of unsuspecting victims on the altar of Mammon, the sooner it falls the better. If our commercial prosperity depends upon the reiterated assertion of a falsehood, it has but a slender basis, and must ultimately be lost. If it be necessary to hang out false lights to allure the unwary to their destruction, that we may gloat upon their remains like beasts of prey, then can we but wish success to every enterprise calculated to divert the course of trade to more honest and more honorable channels. Such, however, is not the case. New Orleans possesses natural advantages, that only require the aid of vigorous hands and honest hearts to attract as strong a tide of immigration, and as great a proportion of the commerce of the country, as she has ever yet received. Do these incorrect and dishonest assertions add one iota to her prosperity? who credits or acts upon them? Go out of the city of New Orleans and find the man who believes them. They deceive nobody but ourselves. The press and the people may reiterate the assertions, but unsupported by reliable statistics, and contradicted by private information, they possess no weight abroad.

What, then, shall be done? Cease to deceive ourselves, and proceed to seek earnestly for the truth, determined to embrace it when found, and hold it up for the inspection of all who are interested. Do not any longer say that the deaths occur in the Charity Hospital—that they are of poor immigrants, who are unaccustomed to the climate—that they are due to the want or imprudence of strangers and the unacclimated, and consider this a sufficient apology for a high rate of mortality; commence

immediately an investigation into the facts, and an examination of the causes of the prevalence of disease, and proceed vigorously to remove them. Reorganise your sanitary corps, and revise your sanitary regulations; compel your Board of Health to do its duty, and to insist upon the performance of duty by all of its officers and dependants; examine the condition, and study the workings of your hospital systems; institute such new police regulations as may be found necessary, and consider the protection of human life against disease and crime, as paramount in importance to every other question. Until this be done, New Orleans will always remain unhealthy. When the citizens of New Orleans are convinced of a truth, admitted by all the rest of the world, viz., that New Orleans is unhealthy, they will endeavor to remove the causes of disease; but until they be assured of this, it is vain to urge the necessity of an extension of water privileges, a system of sewers, the proper paving of the streets, and the prompt removal of filth. Remove the causes of her insalubrity, and her progress in population, wealth and commercial greatness will be more rapid than it has ever been.

Sickness and death is the lot of every organised being; but observation and experience have shown that the amount of sickness, and the proportion of deaths, differs widely at different epochs of life, and in different localities. Though many of the causes of disease and death are still veiled in obscurity, some have been so clearly demonstrated that but little light can hereafter be thrown upon them. Many of the causes that are known are removable by the application of the knowledge and skill of man. By every test that can be proposed, it may be proved that in certain cases the amount of sickness and the proportion of deaths has been diminished by the adoption of proper sanitary measures. The following extract from the Sanitary Report of Massachusetts (pp. 248, 249), will serve, for the present, to prove this:—

‘Sanitary improvements in England first began in the navy. It is observed, in a sanitary report, that so dreadful was once the condition of the royal navy, that, in the year 1726, when Admiral Hosier sailed with seven ships of the line to the West Indies, he buried his ships’ companies twice, and died himself of a broken heart. Amongst the

pictures there presented—as in “Anson’s voyages, 1740-’44,”—were those of deaths to the amount of eight or ten a-day, in a moderate ship’s company;—bodies sown up in hammocks, and washing about the decks, for want of strength and spirit on the part of the miserable survivors to cast them overboard. Dr. Johnson, in the year 1778, thus describes a sea life: “As to the sailor, when you look down from the quarter-deck to the space below, you see the utmost extent of human misery; such crowding—such filth—such stench! A ship is a prison—with a chance of being drowned;—it is worse—worse in every respect—worse air, worse food, worse company.”

‘In 1779, the proportion of deaths in the royal navy was 1 in 8 of the employed; in 1811, the proportion was 1 in 32 of the employed; and from 1830 to 1836, the average number of deaths annually was 1 in 72 of the employed. And in this calculation, the deaths from all sources are included;—from wounds, drowning, and all other external causes, as well as from disease. From the latter source, the deaths were in proportion of 1 in 85 of the number employed, annually. These figures are eloquent beyond any words that can be employed. They excite—as they are fitted to excite, especially at first sight—our wonder. They ought, however, to occasion more of gratitude than astonishment, because the causes of the difference are not difficult to determine, and because almost all that appears in favor of recent times, is due to the superior intelligence and humanity infused into the administration of the navy.

‘Equally good effects have followed the sanitary reforms in the British army. The mortality among the British troops at Hong Kong, in 1842, was at the rate of 19 per cent., or 190 in 1,000; in 1843 it was 22 per cent., or 220 in 1,000; and in 1834 it was 13½ per cent., or 135 in 1,000. But during these years the garrison was very badly accommodated; in 1845 their accommodation was greatly improved, and the mortality diminished to 8½ per cent., or 85 in 1,000; and since that time, the troops having been lodged in what may be termed, from their excellence, “model barracks,” their mortality at once dropped down to 2½ per cent., or 25 in 1,000; a rate not much exceeding that of stations esteemed healthy. Since the adoption of the measures proposed by Dr. R. Jackson, * * *

* * * the diminution in the rate of sickness and mortality has been such as to justify the assertion, that, if this measure had been carried into effect at the time it was first urged by him, the lives of from 8,000 to 12,000 men would have been saved;—a sufficient lesson, one would think, to our authorities, not to delay the introduction of improvements which experienced medical officers concur in urgently recommending.’

This shows that efficient measures will promote the public health; and it is equally susceptible of proof that sickness and death, in an increased degree, and beyond that which is natural to man, and normal to the locality, is the penalty that every community must pay for the neglect of those sanitary requirements that are peculiarly adapted to its situation. The penalty is a costly one, and estimated in any way in which it can be turned into dollars and cents, would be found to exceed, by far, the most lavish expenditure for the most costly hygienic appliances. The cost of the preventible sickness and deaths that have occurred in New Orleans for the last ten years, doubtless exceeds that of the total public expenditure on all other accounts. The persons who have died, and whose deaths should have been prevented, would have placed ours as the third city in the Union, and their lives would have enriched us vastly more than the deaths of the few—very few—who have been unwarily attracted here by the assertions of the salubrity of the city. The cost of the Charity Hospital alone, during eight years, (1842-'49,) has amounted to nearly half a million of dollars. The cost of your Orphan Asylums I do not know—but it must be enormous. To these items should be added a certain portion, which cannot be estimated, of the cost of your police system and judiciary department, for who can tell how much of the crime has been due to the poverty caused by sickness and death, widowhood and orphanage, and the want of parental control and education. The number of beggars upon your streets have, of late, increased to such a degree as to have become a public nuisance, and your public press begins to demand effectual measures for its suppression. None can say how much of this pauperism is the result of the prevalence of disease, but especially of cholera, which is well known to carry off a larger proportion of those in the prime of life than of any other class. Public opinion should commence by following out this pauperism to its cause; and if it be found to depend, in a considerable degree, upon the mortality of the city, it is evident that the most effectual means for its suppression will be the improvement of our sanitary condition.

An accurate investigation into the vital statistics of any region of country, involves but few, though very precise and definite,

principles; but it requires a very large number and an important body of facts, constituting the data to which the principles are to be applied. The facts requisite are, first, the total number of the population, as well as the numbers of the different classes of the community, according to sex, age, place of birth, length of residence, pecuniary circumstances, or social condition. Second, the number of births from this population, specifying the sexes, still-births, etc. Third, the number of deaths, and their causes, as respects not only the total population, but also that of the different classes of the community, viz., the sexes and ages. These data being accurately known, the vital statistics of a community would involve a very simple arithmetical calculation, which, however, would clearly indicate the actual and relative condition of the different classes of the community. Without a complete system for the registration of every birth, marriage, and death, the vital statistics of every locality must be imperfect; but with the register of the dead, and the census returns, an approximation may be made sufficiently accurate to indicate, generally, the degree of salubrity of different localities.

These data, viz., the number of the dead, and that of the living population, may be obtained for almost all cities, and must be assumed to be correct until errors are specifically pointed out, and fully proved.* The ratio of the number of the population, and the number dying during a certain year, constitutes the mortality for that year, which, of course, will not so correctly express the degree of salubrity of any place as the average of several successive years; and in comparing different localities, the greater the number of years of which the average is taken, the more correct will be the comparison. While I have the mortuary statistics of other cities, extending through a sufficient number of years to deduce a fair and correct average mortality, I have only been able to obtain for New Orleans a continuous record for four and a third years; which must, therefore, for the present, be adopted as approximating to the true mortality of this city.

* It is worthy of remark, that the clerics are sworn to perform their duty, and to take the census as correctly as possible, and that being paid in proportion to the number obtained, they can have no reason to underrate the population.

Population of New Orleans:—

City census,	March, 1847,	94,526
State do.	August, 1847,	79,503
United States do.,	July, 1850,	116,407

Population of Lafayette by the United States census:—

1840	3,207
1850	13,350

The census of the city of New Orleans was taken by the city authorities in March, 1847, and amounted to 94,526. In the same year, in August, it was taken by order of the State, and amounted to 79,503. The United States census, nominally referred to July 1st, 1850, but really completed during the past winter, will not differ much from 116,407. The mean of these three censuses is 96,812, which may be fairly considered the average population of New Orleans during the four and one-third years of which the deaths are known. Let it not be said that this underrates our true population. If the data furnished by the censuses are sufficiently correct to constitute the basis of taxation, of representation, and of the apportionment of the school fund, etc.,—if these censuses approximate sufficiently for all political and politico-economical purposes, why impugn their correctness when applied to the more important uses of the statist, in determining the hygiène and sanitary condition of the city.

I have not been able to obtain the census of Lafayette, as taken by the State in 1847, but if we assume that the population increased uniformly from 1840, the total of both cities would average, for the last five years, 106,885. Referring the population of New Orleans, as taken by the city in March, 1847, to the year 1846, the following table will show the population for each of the last five years:—

Estimated population of New Orleans and Lafayette:—

	<i>New Orleans.</i>	<i>Lafayette.</i>	<i>Both.</i>
1846	94,526	7,546	102,072
1847	79,503	8,703	88,206
1848	90,276	10,037	100,313
1849	102,509	11,575	114,084
1850	116,407	13,350	129,757

The mean population of New Orleans during this period is, therefore, 96,644; of Lafayette, 10,242: and of both cities,

106,885. We must now see what number of deaths occurred among this population.

Interments, as shown by the Dead-Books of the Board of Health of New Orleans, and the Sexton's Book for Lafayette Cemetery.

BOOKS OF NEW-ORLEANS BOARD OF HEALTH.

1846, August 30th, to January 2d, 1847, . . .	1,489	
1847, January 2d	7,515	
1848, ————— to April 30th	1,915	
	<hr/>	
	9,430	
	<hr/>	
From the tables of diseases		10,919
1848, May 1st, to 1849, April 30th	9,346	
1849, May 1st, to 1850, April 30th	7,352	
* Deduct Lafayette, Jan. 1st to April 30th, 173	<hr/>	
	7,179	
† 1850, May 1st to December 31st,	5,488	
	<hr/>	
	22,013	

LAFAYETTE CEMETERY.

1846, September 1st to December 31st, . .	281	
1847, January 1st to Do.	1,654	
1848, Do. Do.	784	
1849, Do. Do.	1,716	
1850, Do. April 30th,	418	
	<hr/>	
	4,853	
From examination of names, - - -		26,866
		<hr/>
		37,785

The details of the preceding table are given, that the amount may be verified, if desired; and it is arranged to agree, as nearly as possible, with the arrangement of the records. For the interments in the Lafayette Cemetery, I am indebted to the courtesy of Mr. Hicks, the sexton. It must be observed, that of the 37,785 deaths during the four and one-third years included in the table, 26,866 are directly obtained from the recorded names of the dead; the other 10,919 are from the tabular statements of disease; but all are derived from the manu-

* Those from New Orleans being only reported.

† Includes all interred in Lafayette.

script records, to avoid the danger of typographical errors. The number of deaths is, therefore, certainly not over-estimated, but is known to fall short of the truth, inasmuch as it does not include the deaths in the Hebrew cemetery in Lafayette (except for eight months), nor the bodies of those used for anatomical purposes, nor a portion of those dying in the Charity Hospital, where two are frequently placed in the same coffin, and only one reported to the Board of Health.* The total, however, approximates to truth, and no more is required to show the fearful mortality of New Orleans. We must next calculate the average annual mortality for this period, viz., the last four and one-third years.

The total of the annual population for four years, with one-third of the population for 1846, amounts to 406,284; the deaths amounting to 37,785, would therefore give, as the average annual mortality of New Orleans and Lafayette, 8.10 per cent., or 1 in every 12, nearly. If we take the number given by the United States census, as the average population for the entire period, the mortality would be reduced to 6.7 per cent. Even if we were to take the highest numbers that have ever been obtained as the average population for the entire period, viz., for Lafayette, as above, and for this city, as taken by its authorities in February, 1851, *including one thousand added by order of the Council*, it would only amount to 435,301: and the mortality would be reduced to 6.4 per cent., a number sufficiently high to prove a greater mortality than that of any other city, but still far below the truth. In order to know whether this mortality be excessive, let us see what the statistics of other cities show.

I here present the mortality of the cities of the United States, carefully calculated by myself from authentic data. The data, the principles of the calculation, and the authorities, will be hereafter published, the result only being here given.

* Without attempting, at this time, to calculate the addition to be made on these accounts, I will simply state, that the report of the Board of Health for 1849 shows that 2715 died in the Charity Hospital, while only 5301 were buried in its cemetery. A small portion of the illacients were buried by friends in other cemeteries. In 1850, there died 1681 in the hospital, while 1445 were buried in its cemetery, according to the report of the Board of Health.

Average Annual Mortality of various Cities of the United States.

Boston,	39 years,	1811 to 1849	.	.	.	2.4572
Lowell,	13 "	1836 to 1848	.	.	.	2.1194
New York,	45 "	1805 to 1849	.	.	.	2.9622
Philadelphia,	34 "	1807 to 1840	.	.	.	2.5510
Baltimore,	14 "	1836 to 1849	.	.	.	2.4917
Charleston,	27 "	1822 to 1848	{	Whites	.	2.4826
				Blacks	.	2.6458
				Both,	.	2.5793
Savannah,	8 "	1840 to 1847		Whites	.	4.1616
New Orleans,	4 $\frac{1}{2}$ "	1846 to 1850	.	.	.	8.1017

Average Annual Mortality of Other Places.

* Massachusetts, 1847, '48,	.	.	.	.	1.59
† Twelve Counties of England,	.	.	.	.	1.93
† Twenty-six Cities Do.	.	.	.	.	2.72
‡ London { Males	.	.	.	.	2.74
{ Females,	.	.	.	.	2.31
‡ Liverpool, { Males	.	.	.	.	3.53
{ Females	.	.	.	.	3.15
§ Liverpool, 1850,	.	.	.	.	2.73
§ Manchester, { Males	.	.	.	.	3.65
{ Females	.	.	.	.	3.31

It will be seen that the mortality of New Orleans is nearly double that of Savannah, the highest on the list, two and four-fifths times greater than that of New York, and more than three times that of any other city. I must confess my surprise at the great mortality of Savannah, and must add that it is highly probable that its mortality in former times was even greater, but I have not the data for the calculation. I have the deaths of whites annually from the year 1840, but have been unable to obtain the numbers of the white population of the city, anterior to 1840; I must also add that I have not yet examined the mortality of Mobile, for a similar reason.

But it may be said that the year 1847, should not be included, as it was a very unusual year, nor the cholera period of 1848-'9, as this also constitutes an exception to the general healthiness of New Orleans. I reply, first, that the cholera and all other epidemics are included in the calculations for the other cities:—but let us enter into a more accurate calculation on these points.

* Calculated from Registration Reports.

† Dr. Jarvis on Vital Force—Appendix.

‡ M'Culloch's British Empire.

§ Chambers' Edinburgh Journal. March 1 1851.

The year 1849 is generally considered in New Orleans, a *healthy year, cholera excepted*, as has been repeatedly asserted by the medical profession and the press. During this year, Philadelphia, with a population three times that of New Orleans, had fewer deaths by four hundred, and even if we deduct the deaths from cholera in the latter, the mortality of Philadelphia compared with the population, was but one-half that of New Orleans. From 10,661 deaths in New Orleans and Lafayette during the year, deduct 3,285* deaths from cholera and cholera morbus—there remains 6,577; taking the population at 115,000, the mortality would be (excluding cholera) 5.719 per cent.

Again, let us take the year 1850. Our daily press announced to the world the continued healthiness of the city, the citizens rejoiced in its salubrity, and the medical profession were for the most part idle during the year. The Board of Health state that the cases of yellow fever were so few as scarcely to deserve notice; that cholera was at no time epidemic, and that if any epidemic prevailed, it was dengue, which is not a fatal disease. The Mayor says, in a message to the General Council, as published in the official newspaper.

‘It affords me much pleasure to observe that the city has been perfectly healthy during the past year, and free from all epidemic. This gratifying fact is in part attributable to the opening and laying out of streets in the rear of the city, a measure that must contribute not only to the increased salubrity, but also to the prosperity of New Orleans; at the same time it is due to state that this exemption from disease is also to be ascribed, in a marked degree, to the energy of the Board of Health, who, with comparative limited means at their disposal, have accomplished every thing that could be done towards improving the sanitary condition of the community.

‘The regular weekly publications of deaths by the Board, have not been without their effect, in checking the unfounded statements that were formerly circulated in regard to the mortality of New Orleans, proving, as they have done, that with the rare exception of epidemics, to which all large cities are liable, we can lay claim to as great a share of health as is enjoyed by equally populous communities.’

This, then, is a favorable year, and we can surely take this one as a test, and parade it before the world as a proof of the

* The deaths from cholera in Lafayette are unknown: the increments from New Orleans are, however, included in this number.

general salubrity of New Orleans. The tables published by the Board of Health give 7,819 deaths; I can show omissions, of which no notice is made in the report, which would make the aggregate 8,086, being but 700 less than the average of the last four one-third years, including the cholera and the yellow fever of 1847. The mortality, therefore, of the healthy (for New Orleans) year, 1850, was 6.22 per cent. This must convince the most skeptical. If New Orleans is *healthy* when one in every sixteen persons dies, and when the admissions to the Charity Hospital amounts to one in every seven inhabitants, or 14.1 per cent., then should we be informed what would be admitted to be an unhealthy year, and what number of deaths is requisite to prove the insalubrity of this place.

Again, bearing in mind that the population of New Orleans and Lafayette is less than 130,000, and that during the *healthy* year, 1850, the deaths amounted to 8,086, look at Liverpool: with a population of 370,000, nearly three times that of New Orleans, the deaths only amounted to 10,123; compared with the population, the mortality of this year was in Liverpool 2.736 per cent.—of New Orleans 6.220 per cent.; or, while in every 1,000 sixty-two died in New Orleans, only twenty-seven died in Liverpool. It has been said that the deaths in New Orleans occur among those merely passing through the city, but Liverpool is the place of emigration for the greater part of all the Irish emigrants to all parts of the world. In fact, during the famine in Ireland, it was estimated that at one time there were in Liverpool 100,000 Irish paupers, men, women and children.

We, in New Orleans, consider the past few weeks a period of unexampled health; let us, then, compare the weekly statement of deaths here with those in Boston:

Deaths in Boston. N. Orleans and Lafyt.		
Week ending, 1851, Feb'y 22.....	70.....	132
March 1.....	78.....	135
“ 8.....	77.....	135
“ 15.....	70.....	148
“ 22.....	69.....	157
“ 29.....	74.....	127
April 5.....	81.....	140
“ 12.....	71.....	162
“ 19.....	57.....	180
	<hr/>	<hr/>
	647	1319

The deaths in Boston are obtained from the Boston Medical and Surgical Journal, where are given full details of the causes of death, with the sex, age and nativity; the deaths for New Orleans are from a statement of the Secretary of Board of Health, but the sum of the details is three less than the total given by him.

According to the late United States census, the city of Boston contains 8,000 more persons than the cities of New Orleans and Lafayette, in which, during nine weeks of our healthy season, the deaths are more than double those of Boston. It is the duty of the Board of Health to investigate this subject thoroughly, to point out the causes of this large mortality, the classes of the community among whom it prevails, and the parts of the city in which it exists. It might point out the number dying without medical assistance, and the kind of medical aid; the length of time sick, and the period of residence here. The certificates are, I know, very defective upon many of these points, but until the Board make use of the data furnished, it cannot expect that the medical profession will render them more full. The publications of the Board only serve to prove an excessive mortality, without enabling any one to trace it to its source, that a remedy may be proposed.

These various comparisons show an unparalleled waste of human life, and it certainly demands immediate and efficient action from the city authorities.

It is to be regretted that the hygiene of the city has failed to receive at the hands of those to whom it has been entrusted, that degree of attention to which its importance entitled it. It is to be deeply deplored that, judging from the manner in which the mortuary statistics have been neglected, their value has not been duly appreciated, nor their bearing upon the sanitary condition of the city thoroughly investigated and fully developed.

It is necessary for me to criticise rather severely the last annual report of the Board of Health. My strictures refer to but two topics,—the tables accompanying the report, and so much of the report (about four pages) as summarily disposes of the important question of the sanitary condition of the city. The remainder of the report, devoted to the investigation of

the means to improve and preserve the health of the city. meets, generally, my approbation, and deserves commendation for noticing fully and fearlessly various topics pertaining to the improvement of its sanitary regulations. It scarcely does justice to the subject of the supply of water to New Orleans, but we cannot go fully into this subject at present, and therefore drop it.

We must also express our decided disapprobation of the recommendation to require privies to be dug to the depth of fifteen feet. We had better try to remove, as speedily as possible, their contents, than provide for its accumulation for years, in such a state as to be always a nuisance. Experience would soon demonstrate the impropriety of the measure, for such privies would be constantly full of water, and would, during very wet weather, overflow, even in the highest parts of the city.

In the remarks made upon the report of the Board of Health, I have regarded it as an official document; and I must add, that, considering it a fair exposition of the sentiments of the community upon the subject of the healthiness of New Orleans, I have referred to it more particularly, as the only tangible statement of this sentiment which I feel compelled to labor to controvert, for the good of the community. With many of the members of the Board I have no acquaintance, and of some, do not even know the names. For those with whom I am acquainted, I have the highest respect, as individuals, and I refer solely to the *official* acts of the Board, as a public body, without knowing how many of its individual members may disapprove of its official acts.

The Board of Health have deemed it unnecessary 'to go into profound researches and philosophical speculations connected with the obituary reports;' though how they can determine the health of the city for the preceding year without 'profound researches,' and a thorough and complete analysis of the 'causes of death,' is not stated. It appears to think that its first duty is to assert the *healthiness* of New Orleans; and its second duty, to furnish such tables that none can easily controvert their position. I have, however, completely analysed them, and proceed to give some of the results, with some strictures upon the tables.

If a board of health desired to mystify the facts and conceal

the truths furnished by tables of mortality, it should carefully copy the example given in the tables accompanying the late report of our Board. But let us particularise, lest we be misunderstood. In the first place, an alphabetical arrangement is adopted. This is bad at all times, but becomes intolerable when servilely adhered to, and especially when numerous details are given under each disease. It places together diseases the most dissimilar, from the bare fact of the initial letter of the word by which they are designated being the same. This is the principle of an alphabetical arrangement, than which there can be none worse. If, however, the diseases were carefully condensed under the smallest possible number of terms, and if aggregates only were given, the defects of arrangement would not be so glaring. Open the report at pages 56 and 57, and read. Take only the month of September. There are 44 diseases named; there are 8 classes of persons specified as dying of these diseases; there are, therefore, 8 times 44, or 352 assertions made in this page, of this month, of which but 19 are positive, the remaining 333 assert merely negative facts, viz., that no one of the classes mentioned died of the diseases specified. That blanks must occur in a tabular arrangement is certain, but their occurrence in such enormous disproportion shows that the tables have not been properly digested. Let us read some of the assertions made:—

Of *jaundice* there died *no* white male adult.

“ “ *no* “ “ child.

“ “ *no* “ female adult.

“ “ *no* “ “ child, etc.

But just above we are told, that—

Of *icterus* there died *no* white male adult.

“ “ *one* “ “ child, etc.

Thus, some of the facts purported to be set forth in the table are asserted twice, while contradictory ones are also asserted.

Again, there are eight classes of persons of whom some fact is predicated under each of the twelve months; therefore, 96 different entries, and 3 for totals, and each disease named is repeated six times, making 105 entries, of which a large proportion are of numbers too small for any use whatever. Take *ictus solis*,—there is but one death recorded through these 105 entries,

notwithstanding there is also given *sun-stroke*—a synonymous word. We like to see details preserved, but there is a limit beyond which details obscure the truth. This is but a well-marked instance of the inconvenience of an alphabetical table of diseases. Numerous other instances of diseases so nearly identical, and furnishing so few deaths that they also should be combined, might be given, but it is deemed unnecessary. Justice requires that I should add, that there are but few cases of perfect synonymses.

The first objection to an alphabetical arrangement is, that it places in juxtaposition the most dissimilar diseases; the second, that it causes the introduction of synonymous terms; and the third, that it separates similar diseases. There were but seventeen deaths from fracture during the year, and these are distributed under six different titles, viz., fractures; skull, fracture of; pelvis, fracture of; *thigh*, fracture of; *femur*, fracture of; leg, fracture of. This, again, requires 630 entries, and lacks but eight lines of filling one page of the printed report.

The deaths are given for each sex of white and colored, separately, and each of them is divided into adults and children. It is not stated, however, at what age the period of childhood is supposed to end, and that of adult life to begin. This is very important, and should have been distinctly stated. I have calculated it, from the tables given, at fifteen years of age, which differs from the division formerly made in the reports of the Board, when the numbers were stated under and over ten years of age. The age of fifteen is to be preferred, if the census tables furnish the numbers at the same period, otherwise it will not be possible to determine the relative prevalence of different diseases at different ages.

The Board, however, has adopted the alphabetical arrangement, and as there might be a difference of opinion with regard to any other that might be suggested, and as it appears to think even this supererogatory, we must thankfully receive it at their hands, and not find fault with the arrangement it may adopt. We have, nevertheless, a right to demand correctness in its tables—and this we have not found. Three sets of totals are given: one for diseases, one for interments in the cemeteries,

and one for the ages. Between the first and second there is a discrepancy in 10 columns out of 56; between the first and third there is a discrepancy in 29 columns out of 48. In the table of ages, the totals of the details differ from the totals printed in nine columns out of forty-eight.

Let us carry the examination of these tables a little further :

There are details given of 244 diseases, as named, distributed among eight different classes of people, for each of the twelve months in the year. These numbers multiplied together, give the enormous sum of 23,424 assertions made in the table of diseases, for 7,819 deaths reported, without a total for the year, the months, or the different seasons of the year. In the table of cemeteries, there being twelve, with the same eight classes, and twelve months, there are 1,152 assertions concerning the interments of the 7,819 bodies in the cemeteries. In the table of ages are 17 ages given (with the uncertain) for four classes of persons, for each month, making 816 assertions on the subject of the age of those dying. Thus, the tables make 25,392 affirmations and negations about 7,819 persons reported to have died during the year, averaging nearly 31 assertions for each person; and of these assertions nine-tenths are probably negative. Notwithstanding the extent of the tables, one cannot, without calculation, (and sometimes a most laborious calculation,) answer any one of the following questions:—What is the total number of deaths in any month? the total number of any disease? the total number at any named age? the number of females? of children? of colored? or even the number interred in a particular cemetery. In one word, the tables of the Board furnish numerous details from which might be compiled valuable tables, but in their present form they are of no other use than to perplex and mislead those who may have occasion to refer to them. This is not right: the Board has the power and the means to pay for the compilation of tables that would present every useful and necessary fact pertaining to the mortuary records in so plain a light, that no further labor would be necessary; and such are the tables that it should put forth.

The preceding remark on the tables of the Board of Health require an exposition of the true principles of classification. In

establishing a system of classification for diseases, the first thing to be distinctly set forth is the object for which the classification is proposed, as the principles of classification must differ according to the end in view. The classifications of nosologists were doubtless first undertaken for the purpose of acquiring a clear and distinct view of the symptoms of diseases, with reference to their identification, or the diagnosis of disease; and, secondly, as to the nature of morbid action with reference to the treatment of disease or practical medicine. When the science of medicine is to be taught to another, these principles must be kept in view, and must form the foundation of a classification for the purpose of instruction in the art of practical medicine. It is on these principles, therefore, that all systems of nosology have been constructed, and they have been proposed by practitioners of medicine, and constituted the only arrangements of diseases, until (so far as I am aware) about the year 1838.

In the year 1836, the Parliament of Great Britain passed a law requiring the registration of all births, marriages and deaths, in England and Wales. This threw into the hands of government a vast mass of materials, which required to be arranged, condensed and generalised. The officials on whom this duty devolved, were not necessarily medical men—they were clerks, and it soon became obvious that proper arrangements would diminish greatly their labor. What, then, was required of them? But first, what was the matter in hand? Leaving out of consideration, as at present irrelevant to this discussion, the births and marriages, there was placed in their hands a vast number of *names* of diseases; they had nothing to do with the identification of particular diseases, or their diagnosis. They simply had to work with a mass of recorded *names*, which might or might not convey an intelligible idea to those required to reduce them to order. What, then, was the object proposed in the collection of these names, and for what purpose were they to be used?

The object of the registration was to obtain facts from which to ascertain the *sanitary* condition of the country, and this knowledge was to be applied to the enactment of *sanatory** regu-

* *Sanitary*, PERTAINING to health—(passive.)

Sanatory, CONDUCTING to health—(active.)

lations, i. e., to the removal of the *causes* of disease. A system of classification was therefore required, differing essentially from that of nosologists. The objects were, then, first, to diminish the number of names by bringing together the multitude of synonyms which different nosologists have proposed, that their systems might supersede previous theories. This object, as well as other considerations, required, secondly, that the proposed arrangement should, to a certain extent, conform to the nature of the diseases; but, thirdly, as the chief object of the whole, that the *causes* of disease, as prevailing in different localities with different degrees of intensity, should be kept prominently in view. Mr. Farr, (who has since shown himself an eminent statist), then but an assistant in the office, proposed a system, the outlines of which may be given in a few words. Taking all those causes of death not diseases, he formed a class of external causes of death: the still-born and old age also constituted separate classes. He then selected from the catalogue of diseases, cholera, diarrhoea, dysentery, endemic fevers, eruptive fevers, erysipelas, syphilis, and formed them into a class which he entitled zymotic, and which, depending for their development upon local circumstances and hygienic condition, may be taken as the index to the sanitary condition of different places. This class includes all epidemic, endemic and contagious diseases: all other diseases were considered sporadic, and were distributed into classes according to the organs affected; one class being specially assigned to diseases of general, variable or indeterminate seat. This class has sometimes been misused; thus, Drs. Desaussure and Dawson (in the 'Census of Charleston') have placed under dropsy, in this class, ascites, hydrothorax, etc. The class is, we think, intended only for anasarca, and for those cases reported under the vague denomination, dropsy. Dr. Emerson has done the same thing, and under the title inflammation has included all the phlegmasiæ. It may sometimes be advisable to collect together and present in a supplementary table similar diseases: in other words, to carry as fully as possible, the arrangement of diseases according to their nature; but this should not be allowed to interfere with a different arrangement, and every good arrangement requires that each disease should be named once, and but once.

The English system was adopted by the American Medical Association, with but few alterations, of which the change to an alphabetical arrangement of the diseases of each class is far from meeting my approbation. The same reasons which may be urged in favor of a classification of diseases, apply equally to the arrangement of the diseases in each class. The English statistic had followed out this principle, and the transition from one disease to the next was less violent than necessarily happens in an alphabetic arrangement.

Thus, the classifications in use adopted the principle of classing together diseases according to their causes, to a limited extent only: external causes and zymotic diseases being the only classes to which it was applied. It is really surprising that no other attempt than that of Mr. Farr has been made to apply and extend this principle. The English and American systems possess, however, a greater defect than the mere want of completeness: they are incorrect, inasmuch as the classes do not possess the same degree and extent of generalization. The diseases comprehended in the several classes being regarded as species, the several classes of sporadic diseases are genera, and together would form an order—but the classes of zymotic diseases and external causes not being subdivided, are ranked with the other classes as genera, though they really are orders. It is easier to perceive the discordancy when compared with a correct arrangement, than to explain it briefly, while only looking at the system alone. I shall, therefore, proceed to expound the system which was proposed in the report already referred to, and which I now follow.

All the deaths reported are first divided into those of specified and of unspecified causes of death, and I throw into the latter all errors; that is, after enumerating the specified causes, these deducted from the total will leave the unspecified. This should be necessary only in re-arranging printed tables, where typographical errors render it almost impossible to make the sum of the details correspond accurately with the true totals; but it would also be convenient in the preparation of tables from original data, where the error is so small as not to require an entire revision of the work accomplished.

The specified causes are next separated into three divisions—zymotic, sporadic, and external causes of death. The first embracing nearly all epidemic, endemic and contagious diseases, which depend for their prevalence upon local causes, or those more widely diffused terrestrial, meteoric or other occult causes, rendering one place less salubrious than another, constitutes the standard by which to compare different localities, and to determine their relative salubrity. The second, embracing nearly all other diseases, and those depending upon the constitution and peculiar organisation of the individual, is the standard for a comparison of the different races, sexes, etc. The causes of death embraced in the third division, render it a good standard to compare the social and moral condition of the inhabitants of different localities.

Each of these divisions, as I call them, are subdivided into classes. The zymotic division has three classes—the first, being intended to contain the deaths from any disease which may prevail as an epidemic, is contingent, and will generally be blank; the second, embracing cholera, diarrhoea, dysentery, fevers, (except puerperal and scarlet), erysipelas, influenza or catarrh, thrush, cholera infantum, croup and dengue, is entitled endemic, and is peculiarly the class for comparison of the mortality of different places, with reference to local causes of disease; the third class has been separated from the zymotic class of other statisticians, and is the one to which the term zymotic peculiarly belongs; but the name has been bestowed upon the division to conform as nearly as may be to established usage. This class, embracing hooping cough, scarlatina, measles, vaccination, small pox, mumps, will contain only those diseases to which the human race is everywhere subject, and which, having been once suffered, afford thereafter perpetual immunity, except in a few rare cases; it has been named *monorhysmal*, signifying that its attacks are experienced but once, and that no second *parorhysm* is to be expected.

The second division, or sporadic diseases, depend upon such occult causes that it cannot, at present, be subdivided in accordance therewith; it is, therefore, subdivided according to the organs or parts affected. It contains thirteen classes, of which

one is assigned to diseases of general, variable, or uncertain seat, and to this no disease should be referred whose designation is so explicit as to permit a reference to other classes. To this class I have transferred *anæmia* and *teething*, as being too vague to admit of reference to the classes in which they have been hitherto embraced. For the special diseases included in this and the following classes, reference may be made to the tables, pp. 67 to 78, *ante*.

Instead of diseases of the generative system, I have substituted two classes—diseases peculiar to males, and those peculiar to females, and include, under the latter, diseases of the female breast, and, with some hesitation, hysteria. A special class is also assigned to the diseases of the organs of special sense, less for the few deaths attributed to these, than to render the classification sufficiently complete to be applicable to statistics of morbidity and of hospitals. Deaths from old age, and the still-born, form separate classes under this division.

The deaths from external causes, forming the third division, are sub-divided into three classes, the first of which (Class XVII.) is entitled *Casualties*. It includes accidents, injuries, concussions and compressions of the brain, fractures, drowned, burns and scalds, as well as those dying of meteoric conditions;—the killed by lightning, cold, heat, sun-stroke, drinking cold water, exposure, and also those from the bites of venomous animals. In the next class should be included only those who are wilfully killed, but as the distinction is not generally made in reports, I have assumed that those reported as poisoned and killed belong here, and also that all wounds be considered as commencing the result of the action of another person upon the body of the sufferer. This class is designated *Exopathic*; implying that the cause of death originated without, and that the death is the result of the infliction of another person. The third class of this division is entitled *Esopathic*, and is intended to include those deaths resulting directly or indirectly from the actions of one's self; it will, therefore, embrace suicide, the executed, considered as suffering justly from his own misconduct,—syphilis, as due to the individual's violation of the laws of morality,—and delirium tremens and intemperance, as originating in a deficiency of the power of self-control.

In accordance with this system of classification, the deaths in Boston, New York, Philadelphia, Baltimore and Charleston, for a series of years, and in New Orleans for four years, have been arranged; and it is only necessary to compare twenty classes and three divisions to see the relative mortality of these different cities. This examination shows, that in New Orleans the mortality of nearly every class of diseases exceeds that of other cities; and in the division of zymotic diseases, the proper standard for the comparison of different localities, the excess is frightful. The mortality from external causes, and from each class in this division, is also considerably above that of other cities. It is apparent, even from a perusal of the public prints, that the number of homicides in New Orleans is very much greater than in other cities, and mortuary statistics prove the same fact.

But we must return to the table of mortality of 1850, and leave, for another occasion, a comparison of the mortality of different classes of disease.

I have classed cholera as epidemic during the months of March, November and December. The report of the Board of Health states that, 'during the year 1850 cholera has at no time been epidemic;' but it does not specify what number of deaths is sufficient to constitute an epidemic, in the opinion of the Board. In a report to the American Medical Association (see Transactions, iii., 275), I suggested the propriety of recording, in statistical tables, the prevalence of epidemics, by establishing a distinct class therefor, and gave the following rule for determining when a disease was epidemic: 'The number of deaths for the preceding five years being known, the average for each month, week and day, could be calculated, and whenever the mortality from *one disease* equalled the average for the same period, the disease might be considered epidemic, and the period during which it possessed this character should be noted in the reports.' To this rule I would now add that, in the calculation of the average, the mortality from preceding epidemics should be deducted. This becomes necessary for this city (though it can scarcely be necessary elsewhere), as the constant succession of epidemics would place the average very much too high, the rule itself

placing the epidemic point much higher than would be deemed necessary in any other place than New Orleans, where a mortality at the rate of six per cent. per annum is so common that the city must be considered healthy when it does not exceed that rate. See the following extract from the report of the Board of Health:—

During the year 1850 cholera has at no time been epidemic, nor has it at any moment been entirely absent. Whilst a few deeply-lamented citizens have been its victims, it has principally affected the newly-arrived immigrants, or those ghastly specimens of humanity that occasionally arrive from California. But such victims are already ripe for the harvest: the former depressed in spirit, debilitated by breathing impure air in the hold of an over-crowded vessel, and subsisting on *cheap* provisions, that were damaged before they were purchased: the latter wasted by the labor of mining in mud and water, scorched by the fierce rays of the sun by day, and shrivelled by the chilly blasts of night, that descend from the snow-clad sierras,—and moreover exhausted and attenuated by diarrhoeas and dysenteries, and obscure forms of inveterate intermittents, the almost inevitable consequences of such reckless exposure.

Now, when these two classes of persons arrive in our city, and they are constantly coming, from January to December, they generally fall into great excesses in eating vegetables and fruits: hence the unusual mortality amongst them. But in speaking of the climate of our city, and its tendency to health or sickness—to longevity or early decay—either in the abstract, or as compared with other localities, the incidental recruits that swell our bills of mortality, whether they come from Havre, Liverpool, Belfast or Bremen, or from California, the “El Dorado” of restless spirits, should be excluded from our calculations respecting the salubrity of our climate.’

By such means New Orleans is proved to be the healthiest city in the world. Throw out of the estimate of deaths those not native; if cholera, or yellow fever, or any other disease, cause many deaths, deduct these also from the calculation; but in comparing the remaining deaths with the population, do not even admit the correctness of the census, but add from twenty to fifty thousand for errors and floating population. The very report from which the preceding extract is taken, is accompanied by tables from which the following facts are deduced:—

The deaths from cholera, during the year, amounted to 1,517, constituting one-fifth of the entire mortality; of these 1,517

deaths from cholera, there were 1,245 whites, 272 colored; 962 males, 555 females; 1,176 adults, 341 children. The deaths were distributed through the year as follows: in January, 128; February, 29; March, 415; April, 75; May, 66; June 40; July, 12; August, 8; September, 45; October, 101; November, 367; December, 231. It certainly is not credible that during March, November and December, our city was so crowded with 'newly-arrived immigrants,' as to run up our bills of mortality to the point indicated by the above figures, or that the 'ghastly specimens of humanity' from California should have consisted of so large a proportion of children, of females, and of colored.

To return to the question of the epidemic character of cholera during the past year. The statistical tables of New Orleans are as yet too imperfect to permit the application of the preceding rule: I have, therefore, applied another principle. The mortality per annum, from all diseases, of Liverpool and of Manchester, is nearly three and one-half per cent.; of London, Philadelphia and Charleston, S. C., about two and a half per cent.; of Boston, two and a quarter per cent.; of New York city, two and three-quarters per cent. Let us, then, assume that a mortality of two per cent. per annum will entitle us to consider a disease epidemic. The population of New Orleans and Lafayette, by the last United States census, is about 120,000, two per cent. on which would be 2,400, one-twelfth of which would be 216 per month. The deaths from cholera exceeded this number during the months of March, November and December, and it is therefore considered epidemic during these months. During February, 1849, the deaths from cholera only amounted to 222.

Whether the epidemic influence of cholera was equally felt by all classes of the community, is a question of some interest, that may be approximately determined by the tables now given. We say approximately, for we know too well the incorrectness of the tables published by the Board of Health to rely implicitly upon the inferences deducible from them, but as their incorrectness is not due to any preconceived theory, we may presume that it is equally diffused among the facts stated. I find that for the period during which I have designated it as epidemic, it prevailed in the following proportion per cent.:—

<i>Whites.</i>	<i>Colored.</i>	<i>Males.</i>	<i>Females.</i>	<i>Adults.</i>	<i>Children.</i>
80.5	19.5	63.9	36.1	75.1	24.9

while, during the rest of the year, the proportion was as follows:—

<i>Whites.</i>	<i>Colored.</i>	<i>Males.</i>	<i>Females.</i>	<i>Adults.</i>	<i>Children.</i>
85.3	14.7	62.5	37.5	82.3	17.7

It therefore appears that during the months of March, November and December, the proportion of deaths from cholera among the colored and among children was greater than during the rest of the year, showing that the morbid cause operated during this period with greater force upon the very classes of the community who are most stationary, and who certainly did not come from California.

LOSS BY DEATHS.

Let us now attempt to estimate the loss sustained by the cities of New Orleans and Lafayette during the last four and one-third years; the deaths amounting to 37,785. Gangs of slaves are worth an average price of \$400, and it cannot be considered extravagant to estimate our entire population as worth the same. Moreover the table given below shows, among the deaths, a large preponderance of males and of those in the prime of life, viz., from ten to sixty years of age. The deaths during this period, then, make a positive loss to the city of \$15,114,000 capital. To this must be added the interest on the capital, or the value of the labor of the adults who have died. During the two years 1849 and 1850, the ages of those dying have been published by the Board of Health. From their tables, we find that 61.80 per cent. of all deaths at known ages occur between ten and sixty years: 43.21 per cent. of the entire number being males, and 18.59 per cent. being females, as shown by the annexed tabular statement.

<i>New Orleans & Lafayette.</i>	<i>Deaths.</i>			<i>Proportion per Cent.</i>		
	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>
1849 and 1850.						
Under 10 . .	4,976	2,750	2,226	33.38	18.45	14.93
10 to 60 . .	9,214	6,443	2,771	61.80	43.21	18.59
Over 60 . .	719	373	346	4.82	2.50	2.32
	14,909	9,566	5,343	100.00	64.16	35.84

At least one-half of the females who die between ten and sixty years of age contribute to the maintenance of their families, and to the wealth of the city. We may therefore assume that fully one-half of the deaths are of the producing class of the community. Labor here commands high wages, ranging from twelve to forty dollars per month; two hundred and ten dollars per annum will, then, be a low average for the value of the labor lost to the city, and this, in four and one-third years, will amount to, say, \$900. The loss of the labor of those who have died, then, amounts to $\$900 \times (37,785 \div 2) = \$17,003,250$. The loss by death in capital sunk, and the value of labor, amounts to $\$32,117,250$.

COST OF DEATHS.

But death brings to every family heavy expenses, and a certain amount of expense is incurred even in the death of a pauper. If we suppose eight rates, viz., 1, 2, 5, 15, 20, 30, 40 dollars, equally distributed, would average \$15 as the immediate cost of each death, and the total cost to the city, of the deaths, is $37,785 \times \$15 = \$566,775$.

AMOUNT OF SICKNESS.

In estimating the amount of sickness, we shall first state the estimates proposed elsewhere, though they cannot be adopted for this city. These estimates are based upon the number of deaths, and as the relation between sickness and death is not only far from being uniform, but varies greatly for every different disease, the ratio must differ for every locality presenting a different class of diseases. From observations of the prevalence of disease and the occurrence of deaths, during twelve years, in the public institutions in Lancashire, including Liverpool and Manchester, Dr. Lyon Playfair estimates that for each death there are twenty-eight cases of sickness, which he estimates to continue three weeks. Mr. Shattuck obtains a similar result from the cases treated during nine years in the Boston Dispensary, and adopts it in estimating the sickness of Boston. Mr. Farr considers that the number constantly sick is double the number dying in a year, which, by supposing each case to last three weeks and five days, will correspond with the

other estimate. Mr. Nelson's investigations into the sickness and deaths experienced by the members of the Friendly Societies, give seventeen cases to one death, during the period of life from twenty to seventy years of age.

It is evident that the question involved is but the determination of the average mortality of all diseases, and that the less the mortality the greater will be the number of cases to each death. It is very probable that in Boston and England there are at least thirty cases to each death, or that the average mortality of all diseases does not exceed three and one-third per cent., for the estimates are based upon hospital and dispensary practice, in which the mortality must be greater than the average. Mr. Nelson's results are probably too low (the mortality being too high), for these reasons, that while the deaths are all reported, the sickness reported to the Friendly Societies is only that which will entitle them to the aid of the society, excluding that which does not disqualify from labor, and that does not continue a certain length of time. Perhaps, in some instances, so long a time as one week may be required by the rules of the society to constitute (technically) sickness.

The following table will show the mortality in many hospitals:—

Mortality of various Hospitals.

* Glasgow Royal Infirmary, 1846,	$\frac{434}{4547}$	10.64
† Belfast Fever Hospital, 1817 to 1835,		6.66
‡ London, Ditto, 1802 to 1828,	$\frac{4112}{4112}$	13.39
* Manchester, Ditto, 1842,		8.12
* Birmingham, Ditto, 1842,		8.64
* Bristol, Ditto, “		5.58
* Hull, Ditto, “		5.28
* Leeds, Ditto, “		4.59
* Sheffield, Ditto, “		4.13
* York, Ditto, “		4.27
* Nottingham, Ditto, “		3.35
* Oxford, Ditto, “		3.32
* Worcester, Ditto, “		3.42
* Northampton, Do. “		2.42

~ Edinburgh Medical and Surgical Journal, lxxvii. 382.

† British and Foreign Medical Review, iii., 268.

‡ Tweedie on Fever.

§ All the hospitals in Paris, 1822,	11.87
§ Hotel Dieu, 1822,	14.66
|| Ditto, 1830 to 1839,	11.71
||| Copenhagen General Hospital,	7.00 to 8.00
¶ Hospital of Milan,	13.80
** Massachusetts General Hospital, 1841 to 1845, $\frac{27,134}{2,000}$	9.65
†† Pennsylvania Hospital, — to 1830, $\frac{27,134}{2,000}$	10.93
†† Cincinnati Commercial Hospital, 1849,	15.53
New Orleans Charity Hospital, 1839 to 1850, $\frac{1,133}{1,000}$	15.41
New Orleans Marine Hospital, 1849 to 1854, $\frac{1,123}{2,000}$	5.71
§§ Seamen's Retreat, Staten Island, 1846,	4.00
** Boston Dispensary, 1837 to 1845, $\frac{27,215}{2,000}$	3.72

The only data for the determination of the question with reference to New Orleans, are the records of the Howard Association, and of the Charity and Marine Hospitals.

The records of the Howard Association, which I have been permitted to examine by Mr. Ricardo, furnish the following results:—In 1841, the cases treated numbered 670—the deaths recorded amounted to eighty-six, giving a mortality of 12.8 per cent; in 1847, there were treated 449 cases—the recorded deaths amounting to fifty-two, the mortality was, then, 11.5 per cent. During this epidemic, two infirmaries were opened: in that on Duplantier street the cases amounted to 164, of whom thirty-four died, the mortality being 20.7 per cent. The Infirmary on Spain street gave 28 deaths (excluding the moribund) among 109 cases, being 25.68 per cent.; including those reported as moribund, the mortality would be 33.6 per cent. These records being summed up, show 1,405 cases treated and 213 deaths, which would give as the average mortality from yellow fever during these two epidemics, 15.16 per cent., or one in six and a half.

The records of the Charity Hospital gives as the average mortality from yellow fever, during twenty-five years, 44.27 per cent., or 1 in 2½.—(Fenner's South. Med. Rep., vol. i., p. 124).

§ American Journal of Medical Science.

|| Stewart on Hospitals, 34.

¶ British and Foreign Medical Review, xxiv., 379.

** Shattuck's Census of Boston, 171–173.

†† Journal of Health.

‡ Annual Report.

§§ New York Journal of Medicine.

||| British and Foreign Medical Review, iii., 567.

The average mortality, from all diseases, in the Charity Hospital, during twelve years, is 15.44 per cent., or 1 in 6.47, as shown by the following table:

Abstract of the Annual Reports of the Charity Hospital of New Orleans, for the years 1839 to 1850, inclusive.

YEARS.	Admitted.	Blacks.	Resident over three years.	Discharged.	Died.	* TOTAL Discharges and Deaths.	MORTALITY, per cent.
1839.....	4,833	52	660	3,611	955	4,566	20.9
1840.....	5,011	..	1,231	4,370	619	4,989	12.4
1841.....	4,380	82	1,018	3,093	1,156	4,249	27.2
1842.....	4,404	70	791	3,516	761	4,277	17.8
1843.....	5,013	78	1,146	3,672	1,041	4,713	22.0
1844.....	5,846	54	966	5,059	713	5,772	12.3
1845.....	6,136	144	1,192	5,446	563	6,009	9.3
1846.....	8,044	110	2,034	7,074	855	7,929	10.8
1847.....	11,890	91	843	9,369	2,037	11,406	17.8
1848.....	11,945	15	295	10,010	1,897	11,907	15.9
1849.....	15,558	71	..	12,133	2,745	14,878	18.4
1850.....	18,476	53	..	15,989	1,884	17,873	9.98
12 years...	101,366	..	..	83,342	15,226	98,568	15.44

To the kindness of Dr. McKelvey I am indebted for the following statement of the *Discharges and Deaths* in the Marine Hospital:

	<i>Discharged.</i>	<i>Died.</i>	<i>Total.</i>	<i>Mortality.</i>
1849.....	844.....	48.....	892.....	5.38
1850.....	955.....	64.....	1019.....	6.28
1851 (1st qua'r)	264.....	13.....	277.....	4.69
	<u>2063.....</u>	<u>125.....</u>	<u>2188.....</u>	<u>5.71</u>

* Dr. Simonds here calculates his ratio of mortality from the number of cases treated, to *termination* either in health or death, which, he thinks, is fairly represented by the *discharges and deaths* combined. I can but think, however, it would have been equally as fair to take the *total admissions*, for all whose names are entered on the books were certainly admitted; and, of the large number *unaccounted for*, (mostly absconded,) it is presumable that the greater part had at least gotten well enough to run away. Moreover, the calculation from the *admissions* would probably have corresponded better with similar calculations at other hospitals. — Ed.

Notwithstanding the high rate of mortality exhibited by these Hospital records, when we consider that generally (the New-Orleans Charity Hospital being an exception) none but the gravest cases of disease enter hospitals, we may safely assume that the average mortality of *all* diseases does not exceed five in 100, and I am satisfied that the medical profession here will consider this a large proportion. A mortality of five per cent. is twenty cases of sickness to one death 37,785 deaths: have been before stated to have occurred here during the four and one-third years preceding 1851; there were, therefore, 755,700 cases of sickness. It has before been stated that Farr's estimate would require an average duration of three weeks and five days; Playfair's observations three weeks; and the latter is adopted by Mr. Shattuck in his estimates for Boston. We shall suppose that the average duration is two weeks, presuming a greater prevalence of acute diseases. The number of days' sickness was, then, 10,579,800, equal to the constant sickness, during the entire period, of 6,687 persons, and equal to 28,985 years of sickness experienced during four and one-third years, by a population of less than 100,000, and equal to the entire life-time of 1,159 persons attaining to the average age at death generally attained in this community.

LOSS BY SICKNESS.

Let us see, however, what is the pecuniary loss involved in this amount of sickness. Assuming, for want of more accurate data, that the sickness of the several classes of the community with respect to age and sex is proportional to the number of deaths in those classes, the tabular statement on page 231 will justify us in estimating one-half the amount of sickness as occurring during the producing period of life, among those whose labor conduces to their own welfare, and contributes to the wealth of the community. Supposing, further, that there are 300 working days in each year, or that, in addition to fifty-two Sundays, there are thirteen days lost by holydays, etc.; during the last four and one-third years, the city has lost by sickness the product of 4,347,750 days, $(28,985 \text{ years} \times 300 \div 2)$, of the labor of those whose services are remunerated. It would be a moderate estimate to suppose this labor worth an average of \$1 per day, when

we consider that ordinary laborers get from \$1 to \$1 50 per day, that clerks get from \$1 to \$3 and \$5 per day, that some men count their gains by tens of dollars, and that even domestics get from \$12 to \$15 per month, and their board. Even, however, at fifty cents per day, this loss would amount to \$2,173,875.

COST OF SICKNESS.

Not only does sickness cause a loss of labor; it involves an absolute expenditure of money for medicines and medical services, etc. The charity and private hospitals charge \$1 per day for slaves, and this may be considered a fair average; for although a large portion of the sickness pays no physician's bill, yet surgical operations and wealthy patients must pay sufficient to make this amount near the average cost. The sickness of the last four and one-third years has, then, involved the expenditure of \$10,579,800.

TOTAL LOSS DURING FOUR AND ONE-THIRD YEARS.

Capital sunk by death	-	-	-	\$15,114,000	
Value of labor lost	-	-	-	17,003,250	
					7,250
Value of labor lost by sickness	-	-	-	-	2,173,875
Losses	.	.	.	.	\$34,291,125
Cost of deaths	-	-	-	-	\$566,775
“ sickness	-	-	-	-	10,579,800
Expenditures	-	-	-	-	\$11,146,575
					\$45,437,700

Being an average annual loss of \$10,485,623 to the city, and of nearly \$105 to every individual in it.

Is it, then, surprising that New Orleans has not progressed more rapidly? What other city has had to encounter such losses, and what other city could stand them? New York, when her population was what ours is now, could not have stood it, if, indeed, even now, she could. Is it wonderful that we are heavily taxed, when so large a portion of our wealth has been lost in the sick chamber, and swallowed up by the grave?

It may be said, that an estimate based on the value of slaves is not fair, inasmuch as the latter is an investment of a certain

definite amount of capital, while the inhabitants of the city are voluntary immigrants, who have cost the city nothing; but if a slave were given to any one, would not his death be a loss? The reference to the value of slaves serves only to determine *what amount* shall be the average value placed upon the inhabitants; that those who die are worth something to the city and the State is evident, and the only question is as to the amount. The calculation may be made for the city of Boston as well as for that of New Orleans.

It may be said that crowds rushing in fill the places of those who have died; but it is forgotten that instead of adding to our numbers, to our taxable citizens, and to our productive wealth, they only replace those whose death has not enriched any.

If it be said that thousands die whose death is no loss, or even a real gain, it must not be forgotten that thousands die and hundreds leave our city from its unhealthiness, who would be worth to it much more than the average value I have assumed.

Give to this city a population so numerous that the amount of taxation will be reduced, and the cost of labor diminished, and you will increase its commercial prosperity, inasmuch as you will, by diminishing the charges on the passage of produce to the markets of the world, offer inducements for its consignment to this place.

The important question that must present itself to every mind is, can these losses be prevented?—can this state of things be remedied? I answer, fearlessly, yes. You will point to epidemics,—they are the very sources of disease that can be partially, if not entirely removed. You may refer to cholera, and I can show you that in England her statist and sanitary officers point with triumph to this very disease, to prove the efficacy of preventive measures, and the efficiency of her sanatory regulations. During the late visitation of cholera, what cities have suffered severely by the disease? New Orleans and St. Louis; the former of which I know, and the latter I presume, from this very circumstance, have neglected those means that would have prevented its wide-spread devastation, and its desolating blight. But recently a poor man landed in this city: he, his wife and two children, were crowded into a little

room, with no opening save the door; in a few days one child was attacked with cholera, and in twenty-four hours he was left alone, probably, to fall a victim to our recklessness in not even attempting to prevent an epidemic yellow fever. Is it surprising that the rookeries and purlieus of the city should be filled with disease as well as crime.

The following extracts (slightly altered) from the report on quarantine of the General Board of Health, (of England), though not exactly accordant with my opinions, will be instructive to all, and will probably possess more weight than anything that can be urged by myself on this subject.

‘Epidemic diseases were formerly universally considered to be essentially different in their nature, each being thought to depend on its own specific contagion; and the correctness of this view seemed to be confirmed by the great apparent difference between typhus, scarlatina, influenza, plague, yellow fever, and cholera: but whether each of these diseases depends on a peculiar and specific cause, or whether they all derive their origin from one common agent, essentially the same in nature, but modified by peculiarities of climate, and other circumstances, and which, under varying conditions, gives rise to various forms or types of disease, each having definite characters, and running a particular course.—which ever of these views be adopted, it is agreed, by the most eminent investigators, that there is a general resemblance between these various forms of disease, and that they have the following characters in common:—They are all fevers: they are all dependant on certain atmospheric conditions; they all obey similar laws of diffusion: they all infest the same sort of localities: they all attack chiefly the same classes, and, for the most part, persons of the like ages: and their intensity is increased or diminished by the same sanitary and social conditions.

• The consideration of these common properties of pestilence, under whatever form or name it may occur, has led to the general conclusion that the true safeguards against pestilential diseases are sanitary measures—that is to say, measures which tend to prevent or remove certain conditions, without which pestilential diseases appear to be incapable of existing.

• The essential condition on which epidemic disease depends is, the presence of an epidemic atmosphere, without which, it is now generally admitted, that no contagion, whether imported or native, can cause a disease to spread epidemically.

• The experience of the present epidemic season affords evidence

that the influence of an epidemic atmosphere may exist over thousands of square miles, and yet affect only particular localities. The cases of cholera which have occurred in numerous and widely-distant parts of England and Scotland mark the presence of the epidemic influence, yet, over this extended area, cholera has fixed itself and prevailed as an epidemic only in very few places. Why has it localised itself in these particular places? Probably because it has there found conditions of a specific kind, either local or personal, or both. It follows, that our true course is to make diligent search for all localising circumstances, and to remove them, so as to render the locality unsuitable for the epidemic.

It has been stated, that however wide the range over which the influence of any epidemic may extend, it cannot localise itself in any particular spot unless it find those fitting conditions: and that, by attending to localising conditions, and removing them, we can avert its attack, or arrest its progress when it does break out. This most gratifying and encouraging result has been obtained, on a large scale, in numerous places, with reference to influenza, typhus, and cholera: and the whole tenor of recent experience leads to the conclusion that, in proportion to the intelligence and energy exerted for the removal and prevention of the localising conditions on which the presence of epidemic disease is now known to depend, we can secure immunity from it.

Thus, influenza, in 1847, was found to be four times more prevalent in some parts of London than in others; and in the country, while in some districts almost the entire population were affected, in others not a single individual suffered. The local conditions on which this extraordinary susceptibility to the disease, or comparative immunity from it, depended, are, in a great measure, known, and are found to be within our control.

In like manner, after a careful examination of the experience of Hamburg, with reference to the visitation of cholera in 1832, the general result, resting on accurate statistics, is, that with regard to the same class of the population, there were, among those residing in the dirty and close parts of the town, five times as many attacks of cholera, and nearly four times as many deaths, as among those residing in the clean and airy parts of it—that is, irrespective of the condition of poverty. The difference in the sanitary condition of these two parts of the town rendered the same class of inhabitants in the one district five times more susceptible to the disease than those residing in the other, and increased the actual mortality of the most susceptible four-fold.

But Hamburg accidentally affords a means of illustrating the

power of improved local conditions to secure exemption from the presence of epidemic disease during the general prevalence of an epidemic influence, in its highest intensity, by an observation so exact, and on so large a scale, as to deserve particular reference to it.

“Since the epidemic of 1832, a large proportion of Hamburg has been reduced to ashes by the great fire of 1842, nearly one-third of the central part of the town having been destroyed. This part of the city has been reconstructed on a plan avowedly in conformity with the principles of improvement developed in the Sanitary Report; and though these principles have not been fully carried out, yet the result of an improved sanitary condition, as far as it has been realised, is thus stated by Mr. Grainger:—

“No statistical report of the epidemic of the present year, similar to that of Dr. Rothenburg, has yet been published;* but, after extensive inquiries among several physicians, I am fully justified in stating that the rebuilt part of Hamburg has experienced an exemption from cholera which is as remarkable as it is important. All the medical men with whom I conversed upon the subject expressed themselves unequivocally to this effect; and, indeed, the thing is so notorious, as to be well known to the inhabitants generally. Dr. Rothenburg stated to me, in evidence, that, although there had not been time to classify the cases, it was clear that the epidemic had not advanced so far towards the Alster, or new part of the town, as in 1832. Other physicians state that it has been particularly confined to persons living near the Elbe. Mr. Völkers, whose office enabled him to form a more accurate judgment than other individuals, since it was his duty to take the addresses of all the applicants who came to the central bureau, in answer to my inquiries, states, that from extended observation he had ascertained that, comparing the poor residing in the rebuilt part of the town with those living in the old portion, not more than one of the former had been attacked with cholera for ten of the latter.

“As certainly as the per-centage of typhus decreases with improved drainage, paving and ventilation, so also will epidemic cholera. The proof of this has been afforded, on a grand scale, at Hamburg. The ravages of disease have received a marked check in the present outbreak, by the substitution of wide, open, and well-drained streets, for narrow, filthy, and damp thoroughfares; by the removal of high mounds of earth, blocking up the streets, and overshadowing the houses, and by guarding a large evaporating surface of water from contamination.”

* Since this was written, the official account of the progress of cholera in Hamburg during the last year (1848), drawn up by Dr. Buck, has reached England, and this document fully confirms, in the main points, the previous statements.

But I may be asked how much of this loss may be prevented and will not the prevention cost more than it is worth? One-half, or even two-thirds of this loss should have been saved, and no rational expenditure could equal this amount. But I may add, that no labor that might be bestowed, and no money that could be judiciously expended in determining and improving the hygiene of the city, would be thrown away. Sanitary reform, the question which is agitating other civilised communities, must take place here, whether the movement commences now, or at some future time.

The necessity for a complete revision of our sanitary system is most urgent. At present, no attempt—worthy even of the name of attempt—is made to improve the salubrity of the city, by removing or diminishing the causes of disease, and by improving the condition of the masses of the people; and this for the very obvious reason, that all believe or assert our city to be *excessively* healthy. The only agent in charge of the sanitary police of the city—the Board of Health—is not endowed with sufficient powers to enable it to contribute anything to this end, even if, under its present and past organization, it were competent to the task. Its power is chiefly confined to the preservation of the records of the dead, the results of our defective sanitary system; and this power has, heretofore, been exercised only to the detriment of the city. All that has been done is to publish the total number of deaths, which is sufficient to convince the world, in spite of the contrary assertions accompanying the statements, that New Orleans is very unhealthy. The special causes of this great mortality, the parts of the city in which, and the classes of the community among whom, it chiefly prevails—questions of practical utility in directing attention to those points upon which our sanitary condition might be specially known, and reformation ensue—have been entirely neglected. This should end. Either an efficient system should be established, or the present inefficient, injurious, and expensive one entirely abolished—dispensing entirely with the cemetery records, so that none can know the number of interments. Then would be realised here the sentiment of ‘the dead burying the dead’—those dead to all thought except for the present, and for money making; those dead to all desire for improvement;

those dead to all anxiety for the future welfare of the city they inhabit; those dead to their most important interests, would quietly bury, and quickly forget, their dead.

I have appealed to the medical profession, which elsewhere has taken the lead on this subject; I now appeal to the other classes of the community,—to the city authorities, and to all who, being identified in interest with the city, desire its welfare. To the authorities I submit the following extract from the Report of the Commission on the sanitary survey of Massachusetts:

'Debility, sickness, and premature death, are expensive matters. They are inseparably connected with pauperism; and whenever they occur they must, directly, or indirectly, be paid for. The city or town must pay for the sick man's support, for his food and clothing, for medical attendance on him during life, and for the support of his widow and children (if he have any) after his death. A town in which life is precarious, pays more taxes than its neighbors of a different sanitary character. An individual who is unable to perform a large amount of labor, or no labor at all, is a less profitable member of society than one who can do whatever vigorous health allows.'—(P. 254).

To those who desire the welfare of the city, I will at present only submit, that the moral state of a people is intimately connected with their physical condition. Physical degradation not only engenders crime, but causes disease; and great mortality develops a recklessness of human life and suffering, which, in turn, speedily manifests itself in outrages against person and property.

* * * * *

I have now given the results of a very thorough examination of the mortuary statistics of New Orleans, and the mortality has been shown to be double or treble that of other cities. I have examined the *causes usually assigned* for this great mortality, and have shown that they are not sustained by the facts. The beneficial results of sanitary reform elsewhere have been indicated, and an extended extract has given the views now entertained in England on this subject. I have shown the immense loss sustained by the city in consequence of its sanitary condition, and have thus demonstrated the importance—nay, the indispensable necessity, of the bestowal of more attention to this subject than it has heretofore received, for thus, only, can

be determined the *true causes* of this excessive mortality. The data for the determination of this most important question not having been published, are, at present, only in the possession of the Board of Health. By a rigorous analysis of these data, it would be possible to ascertain, definitely, the mortality properly our own, the *special causes* of our apparently large mortality, and the measures to be adopted for their removal. A reference to the several successive annual reports of the Board of Health will show the existence here of many causes of disease, of which it has in vain urged the removal. Dr. Barton's very elaborate paper, read before the State Medical Society,* also points out causes of disease worthy the attention of the authorities and of the citizens.

Perhaps the most effectual means that can be adopted in the present state of things would be the formation of a voluntary health association, which would concentrate and unite the labors of those individuals whose philanthropy would induce them to engage in undertaking, first, to ascertain the truth with regard to our sanitary condition; next, to inform the community upon the subject, and, finally, to urge those measures that might be deemed advisable. The movement in favor of sanitary reform in England was started in this way, and voluntary associations have contributed most essentially to determine truly, and to improve the sanitary condition of various places. The publications of the Health of Towns' Association are constantly referred to as of peculiar value, and are quoted even in official documents. Such an association here might publish cards to be distributed on board of every ship on its arrival, warning immigrants and strangers of the dangers to which they are exposed, pointing out the cautions to be observed, and especially the necessity of prompt medical assistance. We now have a most worthy voluntary society in the Howard Association, but its labors are confined to assistance rendered the sick during the existence of epidemics. Might it not be made a health association, and become more active at all times in investigating and removing the causes of disease?

[* See this volume, *ante*.]

A sanitary commission should be appointed by authority of the Councils of New Orleans and Lafayette, to examine fully into the hygiènic condition of the city, including in its investigations the internal police of the hospitals, asylums, workhouses, and all public institutions; the condition of the poor and their dwellings; the supply of water, the various factories of gas, chemicals, etc.; the butcheries and dairies; the supplies of milk and bread; in fact, a complete and thorough survey of every thing pertaining to the sanitary condition of the city. The expenditure of \$5,000 or \$10,000 in such a survey would probably save to the city hundreds of thousands of dollars, in the form of its most valuable property, the lives of its citizens.

It is true that the grand jury examines into these matters, but as such bodies do not consist of persons specially selected for this purpose, they are not in general qualified for these investigations; they can only discover the most glaring evils; and the fact that some have been pointed out, shows that there are numerous others that might be discovered.

Having now completed, as far as practicable, this subject, and having submitted it to the public, it remains for it to determine whether farther researches are needed; whether it will contentedly acquiesce in the continuance of such losses, or whether it will require a complete sanitary survey and a thorough investigation into the causes of disease existing here. I need only add my firm conviction that such an investigation will as certainly point out here removable causes of disease, as it has done elsewhere. If public attention be directed to the subject, this investigation will be made; but as long as the necessity for it is not perceived, it will not be commenced.

P. S. I have but exercised an indisputable right in criticising the report of our own Board of Health, but some may think that the minuteness with which I have specified their errors is unnecessary. I must therefore add, and it will be but justice to our Board of Health to state, that similar erroneous principles pervade the reports of other cities. Dr. Wynne complains of the arrangement of the reports of Baltimore. The reports for New York for 1848 and 1849, now before me, and even those of

Boston, if the specimen given by Mr. Shattuck in the census of Boston be still followed, are open to the same complaints. The reports in Charleston are the best I have seen, but they err in a want of detail. My strictures, therefore, may do good elsewhere.

[This is only about one-half of Dr. Simonds' paper; and we regret our inability to publish, at least, a great part of the remainder, as it relates to matters of much interest and importance, such as the preventibility of diseases, the classes among which the chief mortality occurs, the relative proportion of these classes here and at other places, the probable number of our floating population, and its nature, the seasons of the year when the greatest mortality occurs, and various other matters, in respect to which the most erroneous impressions prevail in this community. I can but regret that the author had not been somewhat more lenient in his strictures upon the official labors of the Board of Health. These gentlemen perform troublesome duties, without any compensation, and however defective their action hitherto, we can but suppose they earnestly desire the improvement of the sanitary condition of the city, and that they do as much as any others would do with the limited means and powers conferred upon them. The Secretary of the Board receives a good salary, and should certainly furnish full and correct statistics of mortality. As to the discrepancy between the Board of Health and Dr. Simonds, in regard to the *total mortality* of the year in the two cities, it was a simple omission on the part of the Board to obtain *all* the interments at the Lafayette cemetery, and arose from the fact that the keeper of the cemetery was not required to furnish full reports weekly, until the 1st of May, when the new law went into operation. Previous to that time, he furnished, by request, only such as died in New Orleans and were buried in Lafayette. Such are the facts—as I have found on examination. The omission of about two hundred is not very important, but still its occurrence is to be regretted. I have stated, elsewhere, that the Board of Health made greater efforts than usual this year to have the streets kept clean, and I hope they will not relax their efforts until the sanitary condition of this city may be favorably compared with any other in America or Europe. Then will they receive their reward—not in dollars and cents, but in the satisfaction of seeing our city and its inhabitants healthy, prosperous and happy.]—Ed.